

Geologia Norvegica.

Or, a brief instructive *37. 18. 87*

REMEMBRANCE,

Concerning that very great and spacious

EARTHQUAKE,

Which hapned almost quite
through the *South* parts of

NORVVAY:

Upon the 24th. day of *April*, in
the year 1657.

Also *Physical, Historical, and*
Theological Grounds and Reasons

concerning the causes and
significations of

EARTHQUAKES.

WRITTEN

In the *Danish* Tongue, by *Michael Pe-*
tersen Escholt, sometimes Minitter of
Akers-houfe Castle in Norway.

And Englished by DANIEL COLLINS.

London, Printed by J. H. for S. Thomson at the Bi-
shop, head in St. Pauls Churchyard. 1663.

Geologia Norvegica
 Of a brief descriptive
 REMEMBER A MEMBER
 Concerning the various species
 PART TWO



Which
 the
 NO
 Upon
 Also
 and
 PART TWO

2803:11

in the Danish Tongue, by Michael
 in the Danish Tongue, by Michael
 and Englished by DANIEL COLLINS
 Printed by J. H. for S. Dunster at the B.
 1783

*To the worthy Company
of Merchants Trading
into the Kingdom of
Norway.*

D. C. wisheth much happiness.

Honoured Friends,

THis small ensuing Treatise falling into my hands in *Norway* some time since, after a serious perusal, I thought it not amisse to spend a little time in the translation thereof : and as an acknowledgement of the civilities you have been pleased to shew

The Epistle Dedicatory.

me : do offer it to your acceptation ; knowing, that as your abilities can judge of my endeavour to do the Author no injury, in rendring his sense ; so your ingenuity and Candor will excuse such failings, as herein possibly you may observe to have escaped him who is

Yours to be commanded

DAN. COLLINS.

To

To the Reader,

Although the publication of this little Translation, may seem superfluous unto many: whose knowledge gained by their study of, and search into, the wonderful works of God and nature, may very well make it so to them: yet I am apt to beleewe that others (not so learned) may receive some satisfaction hereby. It having been originally written in the Danish tongue by a Divine of Norway, repated eminent for his Piety and parts, (upon an occasion of the proper subject whereof it discourseth, which I think is not very common, as having not seen the like, yet resembling a little the cause of its being Englished) and was well accepted of by the people there; I doubt not but it may find indifferent, if not the like entertainment here; however
if

To the Reader.

if any benefit do accrue unto any hereby, my
pains will be recompensed. The judicious
Reader is desired to understand it in the
best sense it containeth; in case the relish
of the Danish dialect should any where
make it ingrate to the sincerer palate of
his judgement, or the Historical part there-
of, should seem to Hyperbolize. In confi-
dence of which favour it is left to his mild
censure,

By the Cordial wishes

of his welfare,

DAN. COLLINS.

THE

The Preface.

For the right and more perfect understanding of this speculative Discourse concerning Earthquakes, the Reader may have especial respect unto it under these following Heads or particulars, viz.

1. The Qualities and Properties of the Earth, its wonderfull, yet natural operations within it self.
2. The Fire which is found to be below in the Earth, its wonderfull nature, and powerfull effects.
3. The severall Minerals, Mettals, and Substances in and under the Earth, and how they are wrought and changed.
4. The Air and Wind which is inclosed in the earth, and how it doth

The Preface.

occasion great and terrible Earthquakes.

5. The Physical Description of Earthquakes, with their Species, Operation, and Natural Effects.

6. Historical Relations, what by Experience hath been commonly observed to follow after such great and remarkable Earthquakes.

7. A Theological Conclusion and Instruction out of the Holy and Infalible Word of God, what Earthquakes do signifie and teach unto us.

Unto the Consideration of all which, and for the common Benefit of others, I was moved to compose this little Memorandum, by occasion of that very remarkeable and spacious Earthquake which happened in the South parts of Norway, the 24th. of April, in this present Tear 1657. about a quarter of an hour before 12 a Clock at Noon, when the Sun was in the 15th. Degree of Taurus, and the Moon above the Earth in the first Degree of Aquarius,
and

The Preface.

and the same day hapned also the Planetary Aspect, Quadratus Saturni & Veneris, and the following night, about 3 or 4 a Clock in the Morning another particular Earthquake began afresh, but was not so great as the former.

Concerning the Earthquake which began in the day, I have true and certain Intelligence, That it stretched North and South, from Oasterdale, Sollewer, Totten Wallyers, Ringer Rick, the upper and lower Rønnerick, down all along the Land, and through all Wecken, almost to Bayhouse, above 160 Miles in Length.

And also from the Borders of Sweden that lie Eastward of Norway, thwart over all the Land Westward as far as Lindesnesse, being about 40 Miles more, and it carried such a noise and sound along with it, that the people at first knew not but it was the noise of Thunder, until they perceived the Houses shook, and all their Moveables, as Beds, Tables, and Benches, to tatter, and as it were dance with shaking.

The Preface.

As yet, I have not had a further Relation concerning it, but possibly it might have stretched it self much farther both in breadth and length. Now this Earthquake was so strong and powerful, that it shook the very Islands in the Sea, and the great and small Rocks in the fresh Lakes; and by the very great concussion and trembling, did much amaze and terrifie those that were upon the water, and was more especially seen by such as were upon the great English and Hollands Ships, then here, as also upon other Vessels, Hoyses and small Boats. Yet it hath not done any remarkable harm (that is yet known) any where in the Countrey; neither in Houses, Wallis, or other Buildings, for which we ought to be very thankful to God; and to receive it as an especial Token of his Grace and Mercy, as not signifying unto our Countrey too very great Calamity or Destruction. But notwithstanding in regard that this same Earthquake was of such a length and breadth, namely 160 miles in length, and

The Preface.

as much in breadth, contrary to the Nature of all those Earthquakes that I ever read of, we need not doubt but that it doth signifie some especial and remarkable Change and Alteration.

And this puts me in mind of what the ancient Historiographer Herodotus, hath recorded in his Lib. 6. That when any remarkable change or common calamity approaches, or is impendent over any Land, or people, it is commonly made plainly known by some such unusual preceding Signes and Tokens: And this may be more clearly verified by Examples out of the Scriptures; for before the Canaanites and their bordering Neighbours were subdued and expelled by Joshua and the Israelites, this strange Sign was seen; That the water of Jordan contrary to its nature, stood still above, and ran out below; and gave the Israelites a free passage through upon dry ground, Josh. 3. 16.

And likewise before the 5 Kings of the Amorites were conquered, and their Countrey possess'd by the People of Israel, the

The Preface.

Sun and the Moon stood still each in his Celestial station, about the space of a whole Day, and a Night, Josh. 10. 13. Also before the Moabites were subdued by the Kings of Judah and Israel, the Moabites Water was turned into blood, 2 Kin. 3. 22. I will not now speak of the many Signs and Tokens that preceded the Desolation and Destruction of the hardened Egyptians, and Jerusalem, because it would be too tedious to recite here: But I do averre, that when such unusual signs and tokens do happen, especially when such
Meaning here New-
may. a Mountainous and Rocky Land, even from its Foundation upwards, with its Seas, Streams, and Rivers, shall for the space of so many Miles together, tremble and quake, we ought not in any case to slight, or think lightly of it Wherefore without any longer Delay, I will now enter upon my proposed Discourse.

CHAP.



CHAP. I.

*Concerning the Qualities and Properties
of the Earth; its wonderfull, yet natu-
ral, operations within it self.*



Then we seriously weigh and consider the inward and outward nature and properties of the earth, which God Almighty hath given unto it for the benefit of Mankind; not only that we should have our being and habitation upon it, but also receive our natural lives support and maintenance from it: Then we may very well say with great Joy and Admiration, as the Kingly Prophet *David* did in *Psalm 8.* *O Lord our Lord, how wonderfull and glorious is thy name in all the earth.*

2 *Concerning the Qualities Chap. 1.*

For we do in truth experimentally find,
That the earth is in every kind like un-
to a loving and serviceable Mother, or
Nurse unto us, and therefore is just-
ly termed by that great Teacher of
the *Oeconomicks*, namely *Strach*, *The*
Mother of us all, Chap. 40. v. 1.

For when we are born into the world,
the Earth entertaines us, and as long as
we live in the world, by her plenty and
liberality she nourishes and sustaines us,
and finally, when we shall at last depart
from hence again, she like a tender
Mother, receives us, as it were into her
Bosom, or Lap, and preserves us from
all that evil whereof this world is full,
and lets us rest within her self in peace,
until the last day; when she shall make
such perfect restitution of us again, that
she shall not suffer the least Joynt or
Member of us, to be lost or perish; no,
not a hair, or one drop of Bloud, where-
with *Jab* comforteth himself in his
great misery, in the 19th. Chap. of the
Book of his Patience, V. 27.

And

Chap. 1. and Properties of the Earth. 3

And besides this, we can never sufficiently conceive and apprehend what rich Treasure and precious Jewels the Earth retaineth within it self, partly hidden, and partly discoverable, some whereof she yearly distributeth to her Inhabitants. None of the four Elements is more constantly near us, or a more faithful, and continual Assistant unto us then the Earth.

For the Elements of Water and Air do often much damnifie and endanger us; the Element Fire is too high for us, or else might do us good by its warmth and operation, yet sometimes by Thunder and Lightning doth sufficiently affright and hurt us. But the element of Earth only, as a faithful Nursing Mother, never forsakes us, so long as the world endures, but without cessation doth constantly assist us in Life and Death, in Prosperity and Adversity, so that we are never forsaken of her in this World, no not after Death.

And who can sufficiently conceive or
express

4 *Concerning the Qualities Chap. 1.*

express the wonderful Operations and Labours which the Earth yearly undergoes and performes, night and day for our sakes? She hath never any rest, neither outwardly nor inwardly. Outwardly she produces and provides grasse and Hay for those Creatures which are appointed by God to cloath and feed us; and also several fruitful Trees, each according to his kind, in great numbers: Likewise divers sorts of Herbs, as well for our delight, as Food, Physick, and preservation of our healths. Besides great variety of Corn, as wheat, Rie, Barley, Pease, Oates, and divers other sorts of Grain, which afford us necessary Maintenance and Subsistence.

Inwardly she workes and produces for us many kinds of Minerals, Metals, and precious Stones, which those that labour in the Mines know well how such her Treasure to search for, find, and get, out of the depth of her Bowels, and bring them to light and use. So that we may sufficiently see and observe

Chap. I. and Properties of the Earth. 9
serve that God Almighty hath his especial *Laboratorium*, or Work-house, even in the deepest and most bottomless places, not only to cause wholsom waters, warm Baths, Springs and Rivers to arise, but also to make and produce Gold, Silver, Copper, Tin, Iron, Lead, Brass, &c. And Multitudes of precious Stones.

But now, when this *Laboratorium* or Work-house of the Lord, with all its Treasure and Glory, shall quake, tremble and shake, contrary to its Creators solid fixation, *Psal. 89. 11. & 2 Pet. Ch. 3: v. 5.* Then certainly there must be something out of order somewhere, that doth signifie some especial and unusual thing.

Moreover touching such things as Nature doth so work and produce in the innermost parts and bowels of the Earth, they do partly shew themselves openly above the earth, and do often break out both to the greatest admiration, and terrour of men: Such are
Meteors,

6 *Concerning the Qualities Chap. r.*

Meteors, that is, Fogs, Mists, bright burning Damps, like a flame that flies about, which the Vulgar in *Denmarke* call the *Lanthorn-man*, and also Rings about the Sun and Moon, and a certain moveable Light in the Heavens, which often shewes like Souldiers fighting, Ships sayling, two or three Sunnes together, and the like; All which is caused partly by only earthish, and partly by earthish and waterish Mixtures and Damps together, proceeding from the wonderful workings of Nature within the earth.

And this we may be assured of, that there happens no such admirable and powerful effects of Nature above the Earth, but that there is far greater, and more wonderful operations below and within the earth, by the various workings and Concoctions of Nature, partly by subterraneous water, and partly by subterraneous fire.

Concerning the subterraneous waters, you shall have better Information
in

Chap. II. *and Properties of the Earth.* 7
in the Second and Fourth Chapters,
how they may be the Cause of Great
Earthquakes; but we must speak som-
thing here concerning the subterrane-
ous Fire, which doth also cause great
motion and powerful stirrings in the
Earth; and doth often help to the pro-
duction of Earthquakes, and shall be
handled in the Following Chapter.

CHAP. III.

*Concerning Fire which is found to be be-
low in the Earth, its wonderful Na-
ture and powerful Effects.*



He Learned and wise
Searchers and Inspe-
ctors into Nature deny
not, but that such sub-
stances, as the waters in
the innermost parts of the Earth have
their course through, and do cover,
steep and soak, do give the same wa-
ters

rers several and distinct vertues, smells,
 qualities, tastes, and colours. As for ex-
 ample; The water that runs through,
 steeps, soakes, or covers Brimstony, or
 Viestrillish earth, hath a far different
 nature, vertue, taste, and colour, from
 that which runs through Salt-Peterish,
 Allomish, or Limish earth; but they
 will by no meanes grant that Brimstone
 Bitumen, or other such stuffe which ea-
 sily and suddenly takes fire above the
 Earth, should so heat those seething
 hot Springs within the earth, which do
 arise in several places thereof, because
 the fire is not after such a manner se-
 cretly contained and hidden in them,
 as it is in a Flint, Steel, or in *Calce viva*,
 that is, unslak't Lime; for assoon as the
 Flint and Steel is forcibly struck toge-
 ther, they do presently produce appa-
 rent fire. And when water toucheth, or
 is cast upon unslak't Lime, it kindles it
 self, and presently discovers the secret
 nature of the fire that is in it, and that so
 plainly, that it will quickly set any thing
 afire

Chap. 2. *which is found, &c.* 9

afire that will be kindled by fire.

And therefore we must not think that either the heat of the Sun, or *motus continui*, strong and perpetual motions, which do otherwise occasion great heat here on earth, and sometimes produces fire in Nature, or the inward Warmth of the earth, or any other substance which the subterraneous waters have their course through within the earth, can be the cause of the said waters being so boyling hot, as it is in the hot Bathes, and in many other places of the Earth where it springs up; but it must be the subterraneous fire it self, to which it only and properly belongs *in altissimo Caloris gradu*, to heat it in so high a degree. Which fire without doubt is kindled in several parts of the earth, when the subterraneous water forceth it self *per subterraneos meatus*, or the subterraneous passages and pores of the Earth, where *Calx viva*, or other such kind of inflameable matter is, as aforesaid.

And

And it is here to be observed, That *Bitumen* (by us called *Fewes Lime*) will burn in the water, without having any ayr, but then it must first be set on fire above the water in the open Ayr, and when it is kindled, it will not be quenched by water, no more then burning Pitch or Tarre will, but the more water is cast upon it, the fiercer it burnes.

There is also a Stone called *Gagates*, that will burn vehemently in the water; which *Galen* did so much admire, that only to find and see it, he sail'd with great danger of his Life round about *Lycia*.

Now Brimstone is a substance found in the Earth, which is easily kindled when it is above the Earth, but it will not burn except it have Ayr, whence it may readily be observed, that it is not Brimstone, but *Bitumen*, or *Calx viva*, or some other substance yet unknown, which is the thing that so burneth in the subterraneous waters, and from whence they receive such their extraordinary

Chap. 2. *which is found &c.* 11

ordinary heat, that in many places of the Earth they spring up so extreame boyling hot, that one may scald Swine, Fowle, or the like in them, and that so suddainly, that a man can scarce dip them into those waters before the hair and feathers come off: and if one hold them never so little in, their very flesh will be boyled from the bones, like some hot Springs in *Island*, and in *Germany*: as *Therma*, *Badenses*, and the like.

Of this sort of hot springs, called in Latine *Therma*, and by us commonly called hot Baths; There are enough to be found in several countreys and kingdoms, but especially in *Germany*: as *Leuker Bath* in *Wallissen Land* by the Alpes of *Pænninas*, *Therma*, *Badensis* in *Hegoja*, the *Wild Bath* in the Land of *Wittemberg*, *Wiss Bath* in the Land of *Hessen*: one by *Elbogen* in *Bohemia*, and another at *Achan* in *Brabant*. And that there is a great and dreadful fire in the innermost parts of the earth; a man

C

may

may apparently see and understand by those Mountains that do perpetually flame and burn without cessation, giving a terrible prospect, and yearly casting up vast quantities of Brimstone, Pumistone, and other burnt stuff like that of a Smiths Forge, which the earth works and casts up of it selfe, through such open *hiatus* or holes, by the heat and force of the subterraneous fire, where the said fire hath (as I may say) its breathing places.

Such a Mountain there is in *Island* called by *Cosmographis Mons Heckla*, and by the Inhabitants *Hecklefeld*: the same Mountain burns continually with a blue brimstone-like and most dreadful flame, casting up, and bestrowing the fields round about with such great quantities of Brimstone, that divers Ships may yearly be loaden off with it; and it oft times strews the Land with so many ashes and other burnt stuff, that the Countrey for the space of ten miles round about, can yield no profitable

table increase; and when it burns with greatest vehemence (for it burns sometimes more fiercely then others) it makes a terrible rumbling, like the noise of loud Thunder, and a fearful crackling and tearing, that may be heard a long way off by the Inhabitants, and such as sail by it. The fire of this same Mountain is of a strange quallity and nature, it can burn and consume water, but cannot set on fire or consume Tow.

Saxo Gramm. in praefatione.

Anno 1626. did this mountain of *Heckfield* break out with such a flame, that it cast terrible & unusual pieces of fire out, which flew round about a great way, and burnt up many Houses, and did irreparable mischief to the Land: and according to intelligence, the ashes of that fire flew about certain hundreds of miles: and was also seen in the Northermost parts of *Norway*, which seems to be impossible: yet it is related for certain that it was so. The late Historiographers do write very strangely

cerning such things as do yearly happen by, and about this mountain.

In *Campania* hard by *Neapolis* there is also a burning mountain called *Vesuvius*, or as some call it, *Vesuvus*, which also burns continually without cessation. This mountain hath several times bestrewed the Land ~~thereabouts~~ with so many ashes, that they have cover'd the tops of the trees in the adjacent woods. In the time of *Titus Vespasian*. And *Fl. Domitian*, the same mountain cast up such a fire, that two Towns were burnt by it, and also caused such a mighty and thick smock, that it wholly deprived the Sun of its light all over *Italy*, so that the day there was as dark then as the darkest night; And it also bestrew'd the whole Countrey with such an infinite and incredible quantity of ashes, that it was cover'd over as with a great Snow: which ashes were so blown and carried about by the winds, that they flew to *Africa*, *Egypt* and *Syria*. *Munster lib. 2. de Italia.*

In

In the 16th year of the Reign of *Constantine* the 5. the said *Vesuvius* did very great harm. And in the year 1538. it broke out fresh again with a terrible and dangerous fire, and an Earthquake, and made a fearful deep hole in the earth, in plain and even ground, and round about the same hole cast up a mighty deal of earth like unto a great mountain. *Munster ibidem.*

Pliny that great Naturalist, when he endeavouring to profound the nature of this burning mountain, went too neer the mouth of the hole in the top of it, was choakt by the smoak and damp of the said fire, and lost his life.

In *Sycillia* there is also such a Mountain called *Etna*, which in old time was, and is yet much spoken of for its continual casting up of fire and brimstone: whose fire is only seen at nights, and nothing but smoak a days, except when it breaks out very vehemently: then the fire may be seen day and night. In the year 1537. the same

Mountain cast up a great piece of burning Brimstone into the Air, which fell down again in several places in pieces, and spoiled the adjacent Countreys, Woods and Villages.

The precedent year, namely 1536. the 22. of *March*, did this Mountain of *Etna* begin to cast out a most terrible fire, so that the whole Countrey was amazed and trembled at it: and there was such a dreadful Earthquake, with a crackling and rattling noise, that many dyed for very fear; and the ashe: which that same fire cast up, cover'd over not only *Sycillia*, but also *Calabria* (a Province in *Italy*) like a great Snow.

The Learned Philosopher *Empedocles* was choak'd and destroy'd by this mountains fire and smell: when he to satisfy his curiosity concerning the nature and qualities thereof, went too neer the hole.

Philosophers give the reason and cause of such wonderful and continual burnings to be this, *viz.* That the Earth

Earth is hollow in many places within it selfe, (as shall be further declared in the fourth chapter) and is full of Brimstone, Bitumen, and other kind of substances, which can feed the fire; As also unslakt Lime and Water, by which the subterraneous fire is easiest and oftest kindled ; Now the fire cannot burn except it have Air, or, (as we may say) a breathing place : And therefore it is thought that *Therma* or those hot Baths that are found in several Countreys, must be certain *Spiracula*, or breathing holes, by which the subterraneous fire doth in some kind get air unto it: and when the air, by what means soever it be, gets into the hollow places in the earth where the fire is ; Then that fire increaseth into a flame and maketh burning coals, or living Embers as it were, even in the innermost parts of the earth. Therefore it cannot be doubted, but there must needs be great and wonderful, yet natural *Meatus*, ways or passages, in, and

C 4

under

under the earth, through which the heat and flame of the oft named subterraneous fire, hath in several places its passage, until it gets an open *Spiraculum* or breathing hole through such flaming mountains. Here it is to be noted that those flaming mountains do not burn always alike outwardly, but sometimes more, and sometimes lesse for such reasons as this: When the *Hiatus* or hole which is above in the mountain is stopt with any kind of stuff, so that the fire is smothered and cannot have its free air or breathing place, then it goes out, though not quite, but burns notwithstanding below in the earth; and only sends forth some few sparkles or small flame, and sometimes nothing but only smoak, and a stinking burnt damp smell above the earth, which sheweth that the fire below in the earth is not dead or wholly quenched, but burns and works faintly under the earth, as long, as till either the former hole opens again, or it cannot
break

Chap. 2. *which is found, &c.* 19

break through and make another *Hiss*, or breathing hole, and then breaks out afresh again with so much the greater power and vehemence, not without doing great mischief and damage to the adjacent places, as is afore declared.

Now from hence may any man sufficiently understand and observe, that by the power, operation, and force of such fire, in, and under the earth, there must needs be a boyling, working, distilling, and changing of several Minerals and Metals: especially considering that the Sun, with the rest of the Planets, have also their influence, and do work effectually under the earth: and this must needs be no small cause of great and terrible Earthquakes. How Minerals and Metals are wrought, decocted and prepared by nature under the Earth, shall be handled in the following chapter.

CHAP. III

CHAP. III.

*Concerning several Minerals, Metals,
and substances, in, and under the earth,
and how they are wrought and changed.*

Touching Minerals which are wrought by nature below in the earth, it is according to Physicall judgement thus.

When any dry substance, in, and under the earth, mixeth it selfe with any wet or moist substance, by what means soever it hapneth; whether by the Airs, Fires, or Waters passage under the earth: and the same mixture either by the powerful influence of the Planets, or by the heat of the oft named subterraneous Fire and warm waters, is decocted and well boiled together: then there is produced a Mineral according to the nature of the substances which are mixt together. Also when the subterraneous waters in their several passages

Chap. 3. *Minerals and metals &c.* 21

sages or courses under the earth, do happen to cover over,soak or steep,any kind of mettall so long, that they do contract & gather a thickness to themselves from it, and become like unto troubled waters above the earth: and the same waters (afterwards) comes where the fire is; or the heat of the subterraneous fire doth penetrate and force it selfe through to the same waters, then there is boiled of that water a certain moist substance or matter, which in time comes to be a hard and solid Mineral, according to the nature of that mettall which the waters did so cover, soak, or steep; and from which it had gathered its quality or thickness under the earth. Moreover, when such thick,troubled,and changed subterraneous waters continue long in a place without motion:then that quality with which it is so thickned, mixt, or changed, settles it self to the bottom, (as any thick and troubled water naturally doth) where it remains; and when
the

the water gets any kind of passage out, it runs away; and that which is left behind in the bottom is dried and hardened by the power and influence of the Sun and Planets, and also by the subterraneous air or heat wrought into a Mineral, suitable to the nature and quality of that, from whence the subterraneous waters that are run away, had gathered and received its thickness. And this may now be more easily apprehended and understood by the following examples.

When the waters have their courses and passage through that earth which is full of Copper and such like Ore, and covers, soaks, or steeps it so long and often, that it becomes thick and muddy, and its nature thoroughly altered and changed, or infected by the quality thereof. And the same waters afterward by the heat of the fire, or the power and influence of the Planets, is boyled and distilled in the earth: then it becomes a *Succus* or

or natural green moist substance, whereof being dried, comes the Mineral called *Chrysocola*, (that is *Mountain-green*) and *Kerdigrease*.

In like manner when the subterraneous waters covers over, soaks, or steeps *pyriten arosum & friabilem*. that is a rusty Firrstone, which is easily ground to pieces, and is called in High-Dutch *Kys*: then it becomes a bitter *Succus*, which afterwards turns to *Victril*, and *Alumen liquidum*, that is *Allom*.

Likewile where the subterraneous waters, or liquid substances have their courses and passage thorough, or into Gold and Silver Ore: then it becomes *Lithargyrium Aureum & Argenteum*, that is *Litharidge of Gold and Silver*.

Nor must we think that all Minerals are produced in the earth after this manner now spoken of; but some after this manner, and some otherwise, by the influence of the Planets and other occult natural causes, which ought to put us in mind of the omnipotency of

of God, who by nature worketh the rough and unshapen earth, and earthish liquid substances, into such several, very necessary, and precious Minerals and Mettals, for the great benefit and good of Mankind.

And it is also found by experience that many Minerals are so perfectly decocted and wrought below in the earth, that they do afterwards spring up of themselves thorough the Clefts and Crannies of the Rocks, like a pot that seeths and runs over.

As touching Mettals, they are by nature wrought and produced below in the earth, after divers secret and incomprehensible ways and manners, yea even amongst and within the hard stones and mighty mountainous Rocks by which in like manner we have cause given to consider the omnipotency and bounty of God, whereby he in so wonderful and inconceivable a manner, doth change earth and stone into Gold, Silver, Iron, Copper, Tinn, Lead, and
other

Chap. 3. *Minerals and Metals &c.* 25
other very necessary Mettals for the
profit and benefit of man. And as the
Fish is never so deep in the main Sea
and other great waters & streams, but it
is brought up for the food and sustenta-
tion of man; in like manner is Gold,
Silver, Iron, Brass, Tinn, Lead, &c.
never so deep below in the earth, nor
so hard fastned in, and between the
hard rocks under it; but that by the
Almighty power of God, and the
Art and Labour of those that work in
the Mines, it is brought up to light,
for the use and great benefit of Man.
Concerning which, *Job* in his 28 chap.
1, 2 verses, writes thus. *The Silver hath
its secret passage, and the Gold its place,
Iron is taken out of the earth, and Stone
is melted into Copper.*

Such favour hath the goodness and
omnipotency of God shewed now in
these last times of the world, unto this
Land and Kingdom of *Norway*, especi-
ally since the year 1623. when that rich
and famous Silver Mine in *Sanswerd*,
and

and since that, time after time, the rich Copper-Mine in *Ewster-dale*, and *Gulbrands-dale* as well as the excellent Iron-Mine in *Hedemarken*, and other places, were found out & improved to the great and profitable advancement of Trade.

And here is especially to be noted, that Mettrals are not discovered and brought to light and use in all places alike soone, but some in one *seculo* or century of years, and some in another. After two, three, or more hundred years time: and the reason is, because they are not ripe all alike soone, or perfectly wrought and prepared; as the fruits of Trees or Herbs of the field, are some of them sooner, and some later ripe; and that because some Mettrals are so deep below in the earth, that they cannot so soon grow up, and show themselves above, or upon the earth; nor can be perfectly wrought and prepared so soon as those Metals that are placed higher up in the earth; and it is also partly because many Countreys
and

and places that are full of Ore, and metallish substances do yet lie so far from the Suns and Planets Courses which principally works and prepares them: yea even in the deepest and innermost places of the earth, that they cannot come so soon to maturity, or be discovered and brought to use so soon, as those Mines that are in the *Southern* Countreys, either neerer, or under the Suns and Planets courses.

And hence it is that the Mines in these *Northern* Countreys, especially here in *Norway* and *Sweden*, (whose *Southernmost* borders lie not above 34. degrees from the *Artick* or *North-pole*; but the *Northermost* reaches up to 71. degrees of *North Latitude*) lying far from the Sun and the other Planets courses and operations, have not so soon come to maturity, as those Mines in the *South* countreys, and also in the *East* and *West Indies*, which lye but 30 or 40 degrees from the *Equinoctial* on both sides; from whence great quantities

D

ties of Gold and Silver hath been, and is now yearly brought into these *Norther Countreys*. For the heat of the Sun, and the power of the Planets, by their presence there, have a far greater force and influence in their operation, then they have here with us, where they never come so neer: and besides their power and influence is much obstructed by that natural frost and cold which is here so neer under the Pole.

It is therefore well worth the notice, that when any Ore-Mine is found here in *Norway*, (as happens often, and in many places) which upon tryal is found to yield good and fine Metal, or Ore, though not so rich as to defray all charges; that therefore such Mines ought not to be wholly neglected and slighted, but diligently registred, and taken notice of, for the benefit of our posterity: because the Ore sheweth that there is good and fine Metal preparing in that Mine; and possibly being deeper searcht into, would be found
rich

Chap. 3. *Minerals and Metals, &c.* 29

rich enough: but if it should not then be able to bear the charges; it is because the Metal so found, is not yet ripe enough, and come to perfect maturity, which in time may be; wherein Nature, and the Planets may do very much in halfe a hundred, or a hundred years; so that what is not yet ripe enough, and come to full perfection in our time, may be more ripe, and come to better maturity, in proësse of the time of our posterity, to the great profit, benefit, and advantage of these Kingdoms hereafter.

Now when Metals are thoroughly prepared and come to their maturity, and perfection under the earth, then they do discover themselves above the earth; (like as the fruits of trees, when they are ripe enough, fall down of themselves,) shewing thereby that they are now ripe, or fit to be digged up and used.

And it is related amongst us, that the rich Silver-Mine in *Sanswera* by

Drau, did discover it selfe, by shewing, and putting forth its Ore through the cracks, and clefts of the stones in that rocky Mountain, in the year 1623.

And it happens often, that when the Countrey people here, do burn the wood off from such great places where they intend to sow Corn, that the force and vehemence of the fire reaches into the Rocks, and makes them glowing hot, and then the melted Ore or Metal, runs out of their clefts and cracks, whereby they are often discover'd, and in time improved.

It is also to be admired how wonderfully nature doth prepare and produce several sorts of Ore in strange forms, and shapes: such as are whole pieces of pure Silver, or Copper, in the shapes of Men, Women, Horses, Fowls, Fishes, Dragons, Trees, and the like: which have been really found both in the Silver and the Copper-Mines here in *Norway*, and are safely reserved by
such

such as are partners in the Mines, as miracles of nature.

It is likewise certain, that there are divers Spirits found in many of the Ore Mines: amongst which some do the workmen no harm at all, but otherwise wander up and down below in the Mines, and seem to imitate the Labourers in the Mine, in doing all kind of work after an Apish, Antick fashion; some seem to hew the Ore loose, some to fill that which is hewen, into tubs, and to wind it up: some seem to hasten the rest to follow their work, and yet they do nothing at all, but only mock the Labourers in the Mines; and these are most frequently seen in those Mines where much Ore is shortly after found.

But some of these Spirits are so dangerous and pernicious in some places, that they do destroy and kill the Labourers in the Mines, infesting and expelling them, so that they are forced wholly to give over, and forsake the Mines, and

32 *Concerning several* Chap. 3.
repair to other places, as it hapned at
Anneberg in *Elfatx* in *Germany*, at a
Mine-pit then called *Corona Rosacea*, or,
Rosen Crown.

And here is to be observed that nature doth often, yea, for the most part, mix more sorts then one together, as Gold, Silver, and Copper; as also Silver, Copper, Tinn, and Lead, one with another; from whence this word Metal derives its name from the Greek, *quasi* *Met' αλλο*, the one mixt with the other.

And moreover, besides this, Nature doth sometimes work and produce Metals below in the earth, that are found to be hard, tight, and solid: as if they had been cast, or wrought with the hammer, but sometimes, and most commonly it is found growing in, and mixed with stone: so that the Ory stones must be beaten with pestles as in a mortar, and then the Ore-powder melted in Furnaces, and afterwards refined from the drosse, before any necessary

Chap. 4. *Minerals and metals, &c.* 33
cessary thing can be made of it.

And this may suffice to be spoken concerning several Minerals and Metals, and how wonderfully they may be wrought and changed, within, and under the earth, and do help to the production of great Earthquakes.

CHAP. IV.

Concerning Air, and Wind, that is inclosed in the Earth, and how it doth occasion great and terrible Earthquakes.

IT is an universal Axiome, and Physical rule; *non datur vacuum in rerum natura*; that is, there is nothing found empty in Nature; whence it follows that all things over or under the earth, must of necessity be full, or filled with something, especially with one or more of the four Elements; which be, Fire, Air, Earth, and Water; and where none of the visible Ele-

ments are, there the Air is present, being a thin, subtile, and invifible body, that fills up all places and things every where, which feem to our eyes to be empty; the which we may easily try and experiment, by putting a hollow Reed, Straw, or Feather, into Wine, Beer, Water, or other liquid stuff; yea, though it were Sand, or loose Earth; and afterwards strongly sucking out, and drawing to us the Air that is in the hollow reed or straw; we do presently fee, that before the reed, or straw will be empty, the heavy stuff that is below, will come up into and fill the hollow place in it, until it can recover its lost air again; the same may be perceived when one drinks Tobacco: for when the Air is sucked out of the pipe into the mouth, then before the hollow of the pipe will be empty, the smoak is forced as it were by the power of nature, to forsake the fire that is in the tobacco, to fill up the hollownes of the pipe, least it should be empty.

Now

Now the earth within, is not generally close and tight, but cleft and parted one piece from another in many places. And there are also many Rocks, and great stones below in it, that have their Clefts, Cracks, and Crannies, which are wide and large, and as it were hollow and empty, besides, the earth in many places is sunk down from the Corners, Angles, and unevenness of those Rocks, and Stones, which makes many great, hollow, and as it were, empty places within the earth.

And besides this, the earth is on all sides environed with water, and is with several Seas, and running streams, both salt and fresh, enterlac't, and filled, as the body is with veins: and is also with great and long Rains often wet and moistned, by which means she is soaked thorough with water: and the same water in time gets into those hollow places below in the earth, but being hindered in its course to such places, doth again spring up in certain places of

of the earth, as may by several Springs be perceived and observed; And besides all this, there must needs be a wonderful great water in the innermost parts of the earth, which *Moses*, that man of God, the writer of the creation of the worlds foundation, calls the fountains of the great deep, *Gen. 7. chap. 11. ver.* and *8. chap. 2. ver.* which springs up in many places so abundantly, both hot and cold: that it makes great and rapid streams above the earth. Now where such great waters under the earth, cannot break forward, and force themselves thorough to those hollow places in the earth: there the Air being a more thin and subtile body than the water, forceth it selfe through, and fills them. For as the moisture, humours, and spirits do often force themselves through the Pores of a mans warm body, or a horse that sweats, through whose thick hide, the humours and moisture so pierces, that the Horse seems to smook
again

again with reek. In like manner the Air goes about to and fro below in the earth, seeking to fill those hollow and empty places, according to the appointment of nature, which suffers nothing to be empty, as is before mentioned.

Now when such hollow places are filled with subterraneous water, or with other stuff, then is the inclosed Air, expelled, and forced thence: coming up out of those holes, and appearing above the earth, as a thick fogg, mist, or smoak: which in Latine is called *halitus, exhalationes, evaporationes*: but we here in *Norway*, call it a mist, whereof some are thicker then others, and of different colours, according as the said Air so arising and expelled, hath contracted its thickness and colour from that moisture below in the earth, with which it was mixed and inclosed.

And then if the earth be so close, Tight, and solid, that the Air cannot
so

so suddainly get passage to depart away, it breaks out by force ; and when this conflict and breach betwixt the subterraneous Air and Water happens : then the earth (as the seat of this warr) must certainly quake, tremble, shake, and be moved ; and this is called *Terra motus*, that is an Earthquake: whereof the following chapter more plainly and particularly discourseth.

And that there is no little Air, or Wind in the hollow places of the earth, we may apparently perceive, when it breaks forth in Earthquakes: for then we see that it can cast great stones up into the Air, and lift up the earth: yea great Mountains, and make such a terrible quaking of the earth, that mighty Citys and Towns, Castles Fortresses, high Towers, and Walls, great Churches and Buildings, have been thereby utterly overthrown, sunk, and lost ; as it is Recorded concerning the great and mighty City of *Antioch* in *Asia*: which in the year of Christ

528. was wholly destroyed by an Earthquake, and there was 4870 persons killed by the fall of its Towers, Spires, Walls, and Buildings.

Likewise in the year of Christ 1509. the 14th of September, the City of Constantinople was very much defaced and spoiled by a dreadful Earthquake, which continued 18 days: for it overthrew that long, thick, and strong wall, which stood along by the water-side, and all the houses that stood neer it, to the ground, and fill'd up the Mores and Ditches without the walls, with Rubbish, Stones, and Chaulk, that one might have gone dry-shod over them; The same Earthquake shook down that part of the *Grand-Signiors Pallace* where the Treasury was: and five great and strong Towers quite and clean; and besides all the mischief that it did by Sea and Land, which could not be repaired for many Tun of Gold: it killed and destroyed 13000 persons.

Monster lib. 4.

Likewise

40 *The Physical description* Chap. 5.

Likewise in the year 1517. the 16th of June. There hapned a terrible Earthquake at *Norlingen*, 40 miles from *Nuremburg* in High-Germany, which overthrew *St. Emerania's Church* to the ground: and 2000 houses besides within and without the City, for about the space of eight miles; and the same Earthquake did also overthrow many great trees both in Orchards and Woods. *Munster lib. 3. de Suevia.*

CHAP. V.

Concerning the Physical description of Earthquakes, with their species, operation, and natural effects.

There are certain Divines, which will by no means grant, that Earthquakes should proceed from natural causes: but only from the particular power, appointment, and dispensation of God, according to the
Testimony

Testimony of Job, chap. 9. ver. 5, 6. *He removeth Mountains, and they know not, He shaketh the earth out of her place, and the pillars thereof do tremble.* These I do in equity allow, the retention of their received opinions.

But other Divines do acknowledge that Earthquakes have also their natural causes, by which God Almighty doth occasion their production; and to speak Physically to this: Naturalists do describe it thus.

An Earthquake, is a violent, moving, stirring, shaking, or quaking of the earth: occasioned by the subterraneous, salt-petris moisture and damps inclosed together, with the Air, or wind, in the hollow places of the earth.

Now when such damps and moistures grow so great, strong, and thick, by length of time, that they cannot continue with the subterraneous Air any longer in one hole together: then they do forcibly expell the subterraneous Air from thence: which by nature

ture always giveth way to solid, and thicker bodies : and then there is a kind of civil conflict between them, which of them shall give way, and depart from those hollow places in the earth: if the earth then be poreous, sandy, or loose, the inclosed Air and Wind gets out thorough those Pores or sweating holes, and is seen above the earth like a smoaky Fogg or Mist, as is touched before in the last preceding chapter. But if the earth be so hard, close, and tight, that the inclosed Damps and Air, cannot by its thinnesse and subtilty penetrate, exhale, and force it selfe thorough the pores and sweating holes of the earth : then it breaks thorough the earth violently by its natural force and strength : and thereby causes the earth to shake, and quake, until it can split and burst assunder in some certain place, to give them room.

And hence it is, that such Earth-quakes do seldom happen in those countreys

countrieys or places, where the earth is porous, loose, or sandy: because there the inclosed air, damp, and moistures, can easily penetrate, and force themselves through the earth, and make their way without the shaking or moving of the earth, which cannot be where there is close, tight, and solid earth round about them.

Now as touching the several kinds and species of Earthquakes it is certain truth, found by experience. That all Earthquakes do not happen after one and the same, but after divers kinds and manners. *Aristotle* in *libello de mundo*, reckons up, and describes seven sorts of Earthquakes, each by its particular properties and fashion, according to the strength or weakness of the subterraneous contest of Nature.

1. Amongst which, by some Earthquakes, whole Citys and Mountains, with Houses, and People, sink quite down into the earth: as *Pliny* writes, *lib. 2. cap. 48.* That in *Asia*, in the

E

time

44 *The Physical description* Chap. 5.

time of the Reign of the Emperor *Tiberius*, there sunk twelve great Citys, and principal Towns, quite and clean down in one night by an Earthquake. *Eusebius in Chronic. ad Annum Christi 33. Nicephorus lib. 1. cap. 14.* do suppose that this was the great Earthquake that hapned at the time of Christs death, which was in the 18th. year of the Reign of the Emperour *Tiberius*.

By some Earthquakes, the earth is swelling, and heaved up high above its natural shape and proportion, so that great Mountains and Hills are made there, where before it was plain and even ground. *Freeburgum Brisgaja* was destroyed by such an Earthquake, in the year 1509. And there are many great Islands and places encompassed with water, often thus made; for when this kind of Earthquake happens under the waters, it heaves, and raiseth up the earth sometimes, and in some places so high, that it reaches up above
the

the water, and there it remains, and in time is changed, and comes to be an inhabitable Island. It is Recorded that the Island *Delos*, *Rhodus*, *Alont*, *Thera*, and *Therasia* &c. came up so, and also the Islands of *Echinades*, were so lifted up out of the River *Acheloo*: and certain others in *Egypt*, out of the River *Nilus*, as *Pliny* witnesseth. lib. 2. cap. 87.

3. Some Earthquakes do raise and lift up the earth very high above its natural shape: but as soon as the Earthquake is past, it presently sinks and settles down, and recovers its former natural shape again, and doth not much hurt.

4. By some Earthquakes the earth is torn and divided assunder in a certain place, so that there is a horrible great *Hiatus*, or open hole made, as it happened in *Moses* his time; when such a *Hiatus*, rending, or opening of the earth, swallowed up *Moses* seditions adversarys: such were *Korah*, *Dathan*, and *Abiram*: with certain other men

46 *The Physical description* Chap. 5.

of the children of Israel, 250 Princes of the Assembly, famous in the Congregation, and men of renown: with their Houses, Goods, and all the men that appertained to *Korah*, sunk alive down into Hell, with all that they had, and the earth closed upon them, they perishing from amidst the Congregation. Concerning which, we may read in the 19 Chapter of Numbers, ver. 2, 31, 32,

33. Some Earthquakes make the earth to sink lower down then it was before, and it never riseth up again, but remains always such a low and sunken Land.

26. In some places, especially by the Sea, and sides of great Rivers and Streams, the earth carries away Houses, Trees, Pastures, and Meadows into the Sea, and Rivers, And such particular Earthquakes do often happen here in *Norway*, chiefly in the South parts thereof.

17. In some places the Earthquake carries

ries a great rumbling sound and noise along with it, like unto the noise of Thunder, and so did this, that was now amongst us: for at first we knew not otherwise, but it was Thunder, before we saw the houses and moveables apparently to totter and shake.

1. Now where such Earthquakes, as these do happen, there commonly follows storms and tempestuous winds, with an unusual smell, which ariseth with the Earthquake out of the earth. And such an ensuing storm we had here, in, and about *Christiana*, upon the second *Whitsun-holyday*, which was the 24th day after the Earthquake was past, when we poor sinners, (especially in *Ackers Church*,) were fain to get out in all hast, fearing least the Church should have fallen down upon us: the violence of which storm or whirlwind, continued about a quarter of an hour.

2. And Earthquakes do use to cause drought, and burning heat in the air, which we also were aware of certain

48 *The Physical description, &c. Chap. 5.*

days and weeks time: to the no small damage of the fruits of the earth.

3. The Pestilence also, and other poysonous diseases, do commonly follow after great Earthquakes according as the Air and Damps, which in such Earthquakes break out of the hollow places of the Earth, was poysoned under it, and afterwards poysons the Air above the Earth, and doth naturally produce pernicious and poysonous diseases. But God by his mighty power can graciously divert all these things; what otherwise usually ensues after Earthquakes, is shown in the following Chapter.

CHAP. VI.

CHAP. VI.

Historical Relations, what by experience, hath commonly been observed to follow after such great and remarkable Earthquakes.

THat which is Recorded concerning Comets, *viz.* That they are never seen in the Air or Heavens, without signifying some great and remarkable judgements and alterations ensuing; we may well and truly both say and write, concerning such remarkable and great Earthquakes, that they do signifie extraordinary great mutations: for Histories do show cleerly, even from the beginning of the world; that when any such great and remarkable Earthquake hath hapned in Nature, there hath followed great and notable accidents, and changes upon the earth in several Countreys and Kingdoms.

Concerning those Earthquakes which

are Recorded to have hapned before the birth of Christ, I will not speak at this time, but only commemorate certain of the most notable that have hapned since, and what ensued afterwards in divers places.

In the year of Christ 62. There was a terrible Earthquake in *Rome*: and the year following, that cruel Tyrant Emperour *Nero*, caused the City of *Rome* to be set on fire, of purpose to have burnt it quite down, thereby to delight himselfe with seeing after what manner the lamentable destruction of the ancient and famous Citie of *Troy* was. And when the fire of the City burnt with greatest violence: he went up to the highest Tower, or Terret of his Pallace, and caused the destruction of *Troy* to be plaid, upon several Musical instruments, and sung before him; that fire continued six days and seven nights.

In the year of Christ, 80. there was a great Earthquake in *Cypris*, upon which

Chap. 6. concerning Earthquakes: 51
which followed a great Plague, which
also reacht to *Rome*, and there increas-
ed mightily. Thereupon ensued a great
and destructive warr against the *Ro-*
mans: for *Diurepaneus* the King of the
Goths, advanced with the power of
Gotbland over the River *Danubius*, and
held a bloody battle with *Opius Sabi-*
nus, General of the *Romans*, giving
him and his Army a total defeat, and
killing all, so that there scarcely esca-
ped a man that could carry the *Romans*
any certain intelligence concerning
it.

In the year of Christ 104. there hap-
ned a terrible Earthquake in *Syria*, for
certain days together, whereby many
stately buildings were demolished, and
many people were kill'd and destroy'd;
and it followed thereupon, that the
Emperour *Trajanus* fell into *Armenia*
with a great power, and vanquish'd it;
marched afterwards into *Arbella*, and
subdued the *Parthians*, and advanced
forward in such a manner, as if he had
purpo-

purposed to have conquer'd the whole World: having great fortune and success at the first; but afterwards the *Jews* rebelled against the *Romish* power, and would by no means be any longer subject to them: wherefore under the conduct of *Artemone* their Leader, killed and destroyed in *Cyprus* 240000 men, and slew all the *Romans* that they could find or surprize every where. And after this the Emperour *Trajanus* raised a great and puissant Army, under the command of *Marcus Turbonus*, and *Lucius Quietus*: and sent them into *Jewry*, and the Countreys thereabouts, which took and destroy'd all that came before them: and did conquer and subdue *Hiberos*, *Sarmatia*, *Agarenos*, *Arabia*, *Bosphorum*, *Colchos*, and also *Saleuciam*, *Ctesiphont*, and *Babylon*. *Dion Ammianus lib. 14.*

And after the aforesaid Earthquake, the third general persecution began against the Christians, under the Emperour *Trajanus*; some writers do relate

Chap. 6. concerning Earthquakes. 53

late, that it was as impossible to number the sand in the Sea, as to compute the number of those that were most miserably Butcher'd and Martyr'd in this persecution, for the confession of the faith of Christ,

In the year 111. when that wicked Emperour lay in his Winter quarters at *Antioch*: there hapned a terrible Earthquake again: so that the Emperour *Trajanus*, caused himselfe to be carried out at a window, and remained under the open Heavens, till the Earthquake was past, not daring to trust himselfe in any house, or under any roof, for a long time after, and thereafter followed such a lamentable drought, exceeding hot Air, mis-growth of the Fruits of the earth, Famine, and poysonous Pestilence, and a loathsome Stink from the earth: as if all the Elements had conspired and plotted together, to revenge the blood of those multitudes of innocent Christians, so lamentably butcher'd and destroy'd by that inhumane Emperour. In

In the year 151. there was much harm done in many places of *Italy* by Earthquakes, and thereupon ensued a fearful Plague, which encreased so mightily there, that it left many Towns wholly desolate; and terrible inundations of Water did also spoyle many fair Cities; and a multitude of Grasshoppers devoured all the fruits of the earth, almost all over *Italy*.

In the year 240. there hapned another terrible Earthquake in *Italy*: whereby many Cities, and much people did perish by the opening of the earth; whereupon there was appointed, (*ex libris Sybillinis*,) that general burnt offerings should be made to the Gods: not only in *Rome*, but all over the *Romish* Empire; And thereafter followed that very great & destructive warr, between the *Persians* and the *Romans* on the one hand, and the *Goths* and *Romans* on the other hand: to the great weakning and spoyling of the *Romish* Empire.

In the year 256. there sunk down many

Chap. 6. concerning Earthquakes. 55

many fair buildings, people and all; especially in *Italy*: whereupon there followed terrible distempers all over the *Romish* Empire, that all the Provinces of it were full of warrs and uproars: and there was such a mighty Plague at *Rome*, and in *Achaia*, that there dyed at *Rome* in one day 5000 people, all of the plague.

And the year after, did arise the Sect of the *Samosatenians*, by *Paul Samosatenus* a Bishop of *Antioch*, which did much prevail, and caused very great disturbance in the Church of God.

In the year 345. there hapned a destructive Earthquake, in, and about *Antioch*: whereby many Towns were spoiled and destroyed, and it continued almost a whole year: sometimes ceasing, and presently beginning again. Thereupon followed a great warr between the Emperor *Constantine*, and his Brother *Constantem*, for the Imperial Monarchy, wherein *Constantine* was beaten, and overthrown by *Anquileja*:

Anquileja, and afterwards cast into the flood *Alsa*, where he had his burial.

And after the same Earthquake, did also happen fearful Schisms and differences in Religion: for the Emperour *Constantem*, himsele turn'd *Arian*, and cauled an universal Synod to meet at *Laodicea*: in which those holy Fathers of the Church, and Bishops; namely, *Atbanasius* of *Alexandria*, *Eusebius* of *Vercelis*, *Dionisius* of *Meiland*, *Hillarius* of *Pictavia*, *Paulinus* of *Trier*, and many other Bishops, and at last Pope *Julius* himsele were deposed from their offices and places, and banisht.

And presently after that, did the *Socinian* Heresie arise by *Photinus Presbiterius Sirmianse*, which filled the Church of Christ with much trouble and confusion.

About this, there was a great Synod of Divines met at *Sardis* in *Illyrico*, wherein were Assembled 376 Bishops, at which time the Church of Christ was wretchedly distracted and divided;

for

Chap. 6. concerning Earthquakes. 57

for although 300 of the Bishops remained constant to the true Christian faith and Religion: yet the 76 Eastern Bishops fell from it, and became *Arians*. But the Sect of the *Socinians* was condemned by both sides.

In the year 348, there hapned a great Earthquake in *Campania*, and *Italy*: whereby *Dyrachium* was wholly destroyed, and *Rome* shook and trembled for the space of three days and nights; In *Campania* were many towns quite spoiled: & thereupon there followed again great distractions and disturbances both in Church and State: For the Emperour *Constantem* caused two general Synods of Divines to be Assembled; one in *Armenta* in *Italy*, in which the Catholick Christian faith was confessed and maintained by more then 400 Fathers of the Church, and the other at *Salencia* in *Isauria*: wherein the *Arian* Heresie, was by a hundred and fifty Bishops approved, justified, and

and acknowledged for good. And in the temporal state, there followed a long and destructive warr between the Emperour *Constantem* and *Magnentius*, with unspeakable efusion of blood on both sides.

In the year 366. there hapned terrible Earthquakes all over the world; the Sea broke through in divers places, doing much harm; At *Constantinople* it Hailed such great stones, that they destroyed many People, and much Cattle; *Nicee* was wholly demollished to the very ground: the *Romish* Empire was fill'd with warrs and uproars in all places. The High *Dutch* rob'd and plunder'd in *France*: *Sarmata*, that is the *Polanders* and *Moscovites* on the one side, and *Quadi*, that is the *Silefians* on the other side, invaded *Hungary*. The *Saxons* on the one side, and the *Scots* on the other side, fell upon *England*: the *Goths* did what they list'd in *Pannonia*, and overcame *Scythia*, and *Thracia*; the *Persians* subdued

Chap. 6. concerning Earthquakes: 59

dued and took *Armenia*: so that the *Romish* Empire was lamentably imbroyled: and it proved Earthquake sufficient to the Inhabitants of those Countreys and Kingdoms.

In the year of Christ 400. There hapned a very great and dangerous Earthquake in High *Germany*; and the Heavens lookt like a burning flame for divers days together. Thereupon it followed, that King *Snte* of *Denmark*, waged a destructive warr against King *Biorn* of *Sweden*, in which warr he lost his own life; and the *Lombards*, together with a great resort of several other Nations, marched out of the Countrey of the *Vandals* 300000 strong, over the *Rhine* into *France*, and plunder'd it quite through; from thence they advanced into *Spain*, where they did the like, and continued there a long time. The *Hunnes* also at that time, made an unspeakable warr upon the *Romans*: lost in one battle 125000 men, but slew 210000 of the *Romans*; shortly after
F this

this, they had another battle again, wherein the *Hunnes* lost 40000 men.

In the year 406. there hapned several Earthquakes in High *Dutchland*: especially by the River *Rhine*. Thereupon King *Rorick* of *Denmark* fell into High *Dutchland* the year following: vanquished, subdued, and possesst himselfe of the Countrey round about; went over the River *Rhine*, and destroyed *Mentz*, *Worms*, *Spire*, and *Trier*: ruin'd and destroyed all the adjacent Towns: so that the Inhabitants, yea, even nature it self seemed to be amazed, and to tremble at his approach. For, (which is strange) when he came before the City of *Metis*, (that is *Metz*;) and laid siege unto it; a great part of the City walls fell down to the ground by an Earthquake: so that without any resistance, or striking a stroak, he took the City.

In the year 412. there hapned many Earthquakes both in *Asia* and *Europe*. Whereupon ensued a great plague of pestilence

Chap. 6. concerning Earthquakes. 61
pestilence in most Countreys; and also a most terrible famine and scarcity, by means of the great mis-growth of the fruits of the earth. Also fearful Tempests, Storms, and Hail, that many Hailstones weigh'd eight pound. *Alaricus*, the King of the *West Goths*, fell into *Italy*, and almost utterly destroyed the City of *Rome*, purposed to have destroyed *Italy*, and called *Rome* by the name of *Gothia*. And after these Earthquakes, did also arise the *Pelagian* heresie, by *Pelagius*, an *English* Heretick: against which was holden an universal Synod at *Carthage*, consisting of 270 Bishops: amongst which especially was *St. Jerom*, and *St. Augustine*; also *Atilla* the King of the *Hunnes*, began to tyrannize cruelly in *Europe*, having great and wonderful fortune and success.

In the year 488. there hapned great and terrible Earthquakes in the *Romish* Empire, for a moneths time together: whereby many Mountains, Castles, and

Cities, were destroyed and overthrown, and many people perished. And it ensued thereupon, that *Odoacer* of *Saxony*, by open Hostility invaded *Italy*, and was defeated three times by King *Diderick* of *Bern*: so that he was forced to flye for refuge to *Ravennam*, and was besieged there by the *Goths* three years together.

In the year 544. there hapned (as is Recorded) several terrible Earthquakes, almost all over *Europe*: but especially at *Rome*, and in *Italy*. Whereupon it followed, that *Totillas* the King of the *East Goths*, besieged *Rome* so straightly, that the Inhabitants were forced to eat Dogs and Cats for hunger. Afterwards he took the City, broke down the Walls, Fortresses, and places of strength, plundered, and destroyed all that came before him, sparing none, and set the City on fire: so that for the space of forty days, no body could be there for fire and smoak. Thus was *Rome* utterly destroyed by
the

Chap. 6. concerning Earthquake^s. 63
the *Goths*, according to the prediction
of *Scipio* of *Carthage*, who had prophesied
it with tears 700 years before,
when the *Romans* burnt and destroyed
Carthage.

Two years after, the same King
Totilas, besieged the City of *Placentia*,
so long, and hard, that the Inhabitants
were fain to eat one another, and at last
were forc't to surrender up the City to
him.

In the year 591. there was such a
dreadful Earthquake in *Antioch*, that
more then 60000 persons perished
thereby; and thereupon followed an
extraordinary hot, and dry Summer;
after which, ensued a most fearful fa-
mine and a plague: and the *Lombards*
with much blood-shed did reform the
old *Lombards* gross Barbarism to the
Christian faith.

In the year 832. there was a terri-
ble Earthquake in *Italy*, whereby cer-
tain Citys and Hills were quite swal-
lowed up; Thereupon arose a destru&

ive warr, between the Emperour *Lodovicus Pius*, and his three Sonns, who fought by open warr, raised against their Father, to deprive him of his Government; these three sonns made a League with *Gregory the 4th*, Pope of *Rome*, who threatned to depose the Emperour *Lodowick*. But the *German* Bishops stuck close to the Emperour, and said that if the Pope came thither to excommunicate, he should depart thence excommunicated. The year following, namely, 834. The Emperour *Lodowick* advanced with a great Army into *Alsatx*, to reduce his seditious and rebellious sonns to obedience and submission, but was surprized in the battle of *Lugenfeld* by *Basell*, and *Lotharins*, whom *Lodowick* fully impowred to mannage the Government, together with himselfe, carried his Father prisoner a long time about with him, as a spectacle of wonder. At this the Princes of *Germany* were highly displeased, and desired his Sons, *Lodowick* and

Chap. 6. concerning Earthquakes. 63

And *Pipin*, that they either by good means, or by force, would procure their Lord and Father's enlargement, if they expected to find any faithful friendship from the High *Dutch*, whereupon the Emperour was set at liberty again.

In the year 868. there was a great Comet seen in the Air: after which followed many Earthquakes, and after that, a great plague: and there did arise a terrible warr between the three Brothers, the sons of the Emperour *Lodowick*, which of them should get and enjoy the Empire alone. The *Danes* sail'd over and invaded *Scotland*, and there with sword, fire, and plundering put all things into confusion: went afterwards into *England*, and took *Edmund* the King of *England* prisoner in a Church, drag'd him out, and hang'd him up on a tree, and shot his body full of Arrows, the 20th day of *November* in the year 870. as *Matthew Westmonster* writes. And King

Harrald Haarfager waged a furious warr in *Norway*, for the space of ten years; subdued, and expelled all the petty Kings, and turned the Government into a Monarchy, in the year 878.

In the year 882. the 29th of *December*, there hapned a fearful Earthquake in *Germany*: whereby many fair houses and buildings in *Worms* were destroyed. Thereupon it followed, that the *Normen* and *Danes* under the conduct of *Godfrid* their King, marched to the River *Rhine*, rob'd and plunder'd all wheresoever they came, demolisht and destroyed to the very ground, *Camerich*, *Tornai*, *Arras*, *Tarren*, and *Gent*: burnt up *Lowen*, *Utrecht*, *Lurich*, *Neus*, *Coln*, *Achen*, and *Gulich*. Whereupon the Emperour *Carolus Crassus* was sent for out of *Italy*, by the *French* and *German* Princes, to defend his own Countrey against the tyranny of the *Normen*; but he could not prevail by force of Arms, and therefore concluded a peace with them,

Chap. 6. concerning Earthquakes. 67

them, and delivered into their possession the Province of *Newstria* in *France*, to be their own free inheritance: which is called by them now at this day, *Normandia*, or *Normandy*.

In the year 983. there was a most terrible Earthquake in *Italy*, whereby *Beneventura* and *Capua* were destroyed. Thereupon followed an extraordinary drie Summer, and burning drought, which occasioned a great scarcity, and a fearful plague.

In the year 990. there hapned terrible Earthquakes in many places: and thereupon ensued fearful, and incredible inundations of water all over *Europe*; upon which followed an extraordinary hot and dry Summer, that burnt up the fruits of the earth: which occasioned a great scarcity and famine every where. In *Saxony*, there rained Fish out of the Air; and in *Albania*, there rained Corn from Heaven, but unfit for the use of man. The Sunn was wholly

wholly Eclipsed, and a great piece of fire fell down out of the Air, and burnt upon the earth; after which, followed a most terrible plague: so that the living which bare the dead (to their graves) fell down dead themselves, and were buried together; and there came much fire from the River of *Rhine* also, by which many of the adjacent Towns and Villages were wholly burnt up.

In the year 1085. there hapned a fearful Earthquake in *England*: whereby many houses were overthrown, and much harm done; and it followed thereupon, that King *William* of *England*, caused all his Subjects annual Profits, Estates, and Incomes, of every kind, both of Corn-land, Meadows, Woods, Pastures, Cattle, and Sheep, and every thing they had to live upon, to be Registered: and accordingly required great contribution of the Countrey: which caused dangerous civil tumults, uproars, and discontents in the Land,
and

Chap. 6. concerning Earthquakes. 69
and there followed also a very unfruit-
full year.

In the year 1085. there hapned a
terrible Earthquake in *Lorain*; where-
upon there followed a fierce plague,
and suddain death of people. And the
same year, there was unspeakable harm
done in the *Netherlands*, by great and
unusual inundations of water, both to
people and Cattle.

In the year 1126. there was ano-
ther terrible Earthquake in *Italy* which
lasted 40 days. Thereupon followed a
lamentable mis-growth of the fruits of
the earth, and a most miserable famine;
as also a destructive and bloody warr
between the Emperour *Lotharius*, and
the *German* Princes: and between
the *Bohemians*, and *Conrad*, Duke of
Frankenland.

In the year 1135. there were seve-
ral terrible Earthquakes heard of, both
in *England* and in *Germany*; whereby
many houses were thrown down; the
fire also burnt fearfully out of the earth,
for

for certain days together, and could not be quenched by water, nor by any other kind of thing. And besides that, there was very great mischief done in many places of *Germany* by other fire: *Mentz* and its Cathedral was burnt: in the Cities of *Spire*, and *Straßborg*, many Churches and Cloysters were laid in Ashes: *Ausburg* was almost quite burnt up, and a third part of *Goslar*. *Hall* in *Saxony*, flew up into the air in a smock: and the next year following, there was such an extream hot, and dry Summer, that the waters in great Rivers, Channels, and streams, contrary to Nature, did so diminish, that men might have gone dry-shod over, where great Ships used to sail; the Wells and Springs also became dried up in many places, that many men fainted and dyed of thirst, as well as Cattle: yea many Buildings and countrey Villages were set on fire by the heat of the Sun, and it caused a terrible famine in *Europe*.

In the year 1155. there fell many
houses

Chap. 6. concerning Earthquakes. 71

houses down in *Burgundy*, and thereafter followed a great dissention between the Emperour *Frederick Babarosa*, and the Pope of

Note, that this must doubtlesse be by an Earthquake.

Rome: which continued many years with much efusion of blood: until the Emperour was openly excommunicated out of the *Romish Church*, and suffer'd himselfe to be publikely absolved in *St. Marks Church* in *Venice*; where *Pope Alexander* was not therewith contented, that the Emperour went bareleg'd to the Church, and there kneel'd on his bare knees, with Prayer and Fasting, for his offence committed against him: but the Pope also shamelessly trode upon his neck with his feet.

In the year 1194. there was a great Earthquake in *Denmark*, and it follow'd thereupon, that the *Vandals* fell from the *Danish Crown*, forsook their Christian faith, and returned to the former idolatrous worship again; whereupon

upon King *Knute* of *Denmark* raised all the power of his Countrey, caused the *Schleswickers* to prepare 130 Ships, the *Reepers* 120, the *Wendfussellers* 50, the *Fyeners* 100, the *Sealanders* 120, the men of *Skone* 150, in all 670 ships: and therewith fell upon *Knute*, King of the *Vandals*: who destroyed and kill'd all that came before them, and carried away much plunder of Goods and Cattle out of the Countrey.

In the year 1300. there hapned a fearful Earthquake almost all over *Europe*; thereupon followed an unusual dry Summer, with extraordinary heat: so that in *Denmark*, and the small Islands, men scarcely knew where to find any fresh water in any place.

And in *Italy* there arose such a fearful civil warr and dissention between two Princely Families, called the *Guelphs*, and *Gibelines*, that it had neer ruin'd whole *Italy*.

It will be needless to write any thing more out of History, concerning Earth-quakes,

Chap. 6. *concerning Earthquakes.* 73
quakes, and what remarkable things
have always ensued; for from those
many that are Recorded, it may suf-
ficiently be seen, that Earthquakes
signify no great good to Countreys and
Kingdoms: but God, by his Almighty
power, can divert much evil.

*A Theological conclusion, with some in-
structions out of the Holy and infalli-
ble word of God: what Earthquakes
do signifie and teach unto us.*

NOW when we enter into the
Sanctuary of God: that is, in-
to his Holy and infallible Word, and
there seek and enquire diligently for
right instructions concerning Earth-
quakes: then we shall receive this in-
formation, *viz.* That God did create the
world at first, that it should be, and remain
fixt and unmoveable: concerning which,
the

the Scripture giveth this testimony.
*1 Chron. 16. 30. Fear ye the Lord all
 the earth, the world also shall be stable,
 that it be not moved. And also Psalm
 89. 12. and 102. 25. In fundasti ter-
 ram, Thou hast laid the foundation of the
 earth, and all that is in it. Also Psalm.
 104. 5. Who laid the foundations of the
 earth, that it should not be removed for
 ever. Also Prov, 3. 19. The Lord by
 wisdom hath founded the earth. And Isai.
 48. 13. Mine hand also hath laid the
 foundations of the earth.*

From whence, and other the like
 Oracles of the wholly Scripture, we
 may cleerly discern and understand,
 that God did not create the earth so
 loose and unfixed in the beginning, that
 it should shake, tremble, and quake, but
 always to remain steady, and unmove-
 able. *2 Pet. 3. 5.*

But when the Earth, contrary to the
 fixed nature of its Creation, shall trem-
 ble, quake, and shake; then there must
 certainly be some extraordinary and
 important

important causes: of lewhereof the Holy Scriptures more especially intimateth two; which moveth God to permit and produce such great and terrible Earthquakes; namely. First, *When the wickednesse of men is great upon the earth, and the earth is corrupt, and filled with violence, Gen. 6. 5, 11, 13.* Then is the Righteous and just wrath of God provoked to move the earth himselfe, and cause her to tremble, thereby to destroy men, yea even the earth it self also. Gen. 6. 13. By removing the Mountains, and they know not, which he overturneth in his anger, when he causeth the earth to be shaken out of its place, that the pillars thereof do tremble, as Job speaketh, chap. 9. 5, 6.

Concerning which, the Holy scriptures do give this further testimony, Exod. 15. 12. *when thou stretchedst out thy right hand the earth swallowed them.* Plal. 18. 7. *The earth shook and trembled, the foundations also of the Hills moved, and were shaken, because he was wroth. And*

Psal.

Pfal. 104. 32. He beholdeth the earth and it trembleth, he toucheth the Mountains and they smoke. And concerning such Earthquakes, the Prophet Isaiah teacheth thus, Chap. 13. 13. The earth shall be removed out of her place, by the fury of the Lord of Hosts, in the day of his fierce anger. And chap. 24. 18. 19, 20. The foundations of the earth do shake, the earth is utterly broken down, the earth is clean dissolved, the earth is moved exceedingly, the earth shall reel to and fro like a drunken man. And Isai. 29. 6. Thou shalt be visited of the Lord of Hosts with Thunder, and with Earthquakes, and with great noise: with storms and tempests, and with the flame of a devouring fire. Also Nahum 1. 5, 6. The mountains quake at him, the hills melt, and the earth is burnt at his presence, &c. Now where God in his wrath hath thus shaken the earth, there her inhabitants might very well sigh deeply, and pray with David in Psal. 60. 2. O God thou hast made the earth to tremble, thou

thou hast broken it, heal the breaches thereof, for it shaketh.

Secondly, when God hath been about to do some extraordinary thing upon the earth, or make any remarkable alteration in Countreys and Kingdoms; the Holy Scriptures do testifie, that it is made known by preceding Earthquakes, as by so many *prodromos* or Harbingers; As for example, when God himselfe descended down after an especial manner upon mount *Sinai*, and there gave his wholly Law to the *Israelites*, for the direction of themselves, and of the whole world, *Then did the whole Mount greatly quake*, *Exod. 19. 18.*

And when God brought his people out of *Egypt*, (though *Moses* hath not recorded that any Earthquake happed then,) yet the Holy Scriptures do show, that it was not done without a notable Earthquake: by which the red Sea was divided in that place that the children of *Israel* went through, and

was so dry for the space of about sixty miles, as the Tables of *Cosmography* do shew, that the *Israelites* could go thorough dry shod, *Exod.* 14. 21, 22. As *Dabarab* the Prophetesse and Judge, and *Barack* the son of *Abinoam* the Captain, do testifie concerning this in their song of praise, *Judg.* 5. 4, 5. when the Lord went out of *Seir*, and marched out of the fields of *Edom*, the earth trembled, and the mountains melted from before the Lord. And with this agreeth that of *Asaph*, one of King *Dauids* chief Musitians, *Psal.* 77. 16, and 18. The waters saw thee O God, the waters saw thee and were afraid, &c. the voice of thy Thunder was in the Heavens: thy Lightning lightened the world, the earth trembled and shook. And that none should doubt that this hapned at the very same time when the children of *Israel* came out of *Egypt*. *Asaph* concludeth the aforesaid *Psalme* with these words in the last verse, Thou leddest thy
people

and instructions out of, &c. 79

people like a flock, by the hand of Moses and Aaron.

Moreover, when God would in an especial manner, appear unto that precious man of God, the Prophet *Elias* upon mount *Horeb*, and there verbally instruct him, what he in the Lords behalf should do in several Kingdoms; Then there hapned a great Earthquake before, but the Lord was not in the Earthquake, as we may read in *1 Kin. 19. 11.*

It is also Recorded by the Prophet, *Amos*; that there hapned in *Fevery* a great Earthquake in the days of *Uzziah* king of *Judah*, and of *Jeroboam* the son of *Joash* king of *Israel*; and *Amos* was called by God two years before the said Earthquake, from amongst the Heardsmen of *Tekoa*, to preach and reprove sharply the great and manifold sins which did then abound in all the Countreys thereabouts: as we may read in the first chapter of *Amos*, *vtr. 2.*

&c. and in the following Chapters.

And that this same Earthquake was no small one, we may sufficiently understand by that propheticall Doctrine, which the Prophet *Zachary* preached unto his Auditors certain hundreds of years after: when he putteth the remnant of the people of *Israel* that were returned home from their 70 years *Babylonish* captivity, in mind: and did then cause them plainly to understand, that the said Earthquake, was a great, terrible, and dreadful one; for the Prophet writes thus, *Zac. 14. 5. ye shall flee, like as ye fled from before the Earthquake in the days of Uzziah King of Judah.*

As for the new Testament, therein do the Holy Evangelists make mention, concerning several Earthquakes that hapned in those times.

The Evangelist *St. Matthew* in chap. 27. 51. and forward; writes, that at the time of the death of *Jesus Christ*,
the

and instructions out of, &c. 31

the vail of the Temple was rent in twain from the top to the bottom, and the earth did quake, and the rocks rent, and the graves opened: So that the Centurion, and those that were with him watching *Iesus*, when they saw the Earthquake, and those things that were done, feared greatly.

By this Earthquake, doubtlesse the Lord for his part did show his fierce wrath against those that had dealt so unmercifully with his only beloved son: and on the other side, Christ himself did also show his enemies, how easily he could have caused the earth in that Earthquake, to have opened under them, and suffered them altogether, like the seditious *Korah*, *Dathan*, and *Abiram*, in former time, with all their retinue, wives and children, to have sunk down alive into Hell, *Numb. 16.* But our most Gracious and patient Saviour, was not come then to destroy, but to redeem and deliver mankind

from the wrath and righteous judgments of God *Luk 9. 56.* And therefore not one *Few* of the enemies of Christ perished in this Earthquake, but the long suffering of God did hereby yet seek to draw them to repentance, *Rom. 2. 4.*

Also at the time of our Lord Jesus Christ his Resurrection: there hapned a great Earthquake again, concerning which, the above named Evangelist St. *Matthew* writeth thus, *chap. 28. 2, 4. Behold there was a great Earthquake, &c. and the keepers did shake, and became as dead men.*

Concerning this Earthquake, Divines are of severall opinions: for some think that this Earthquake hapned, *sub descensu Christi ad inferas*, when Christ descended into Hell, or to the lowermost, or innermost parts of the earth, as St. *Paul* writeth, *Eph, 4. 9.* And then presently did a mighty great conflict begin, between the Prince of darkness
(the

(the Devil) on the one side, that would have preserved his Pallace, and kept what he had in peace, *Luk 11. 21.* And the Prince of life, and Lord of Glory, the Lord *Jesus Christ*, on the other side, that is called a stronger then he, that came upon him to overcome him, *Luk 11. 22.* And by this great and powerful conflict, Christ redeemed mankind, and took away the power from him that had the power over death, (that is the Devil) and delivered them, who through fear of death, were all there life time subject to bondage, *Heb. 2. 14. 15.* wherein the Devil with all the powers of Hell, strived mightily to oppose him, but Christ gets the victory at last, having spoiled the principalities and powers, he made a shew of them openly, triumphing over them in it. as *St. Paul* writes, *Collos. 2. 15.* and that according to his own prophesie by the Prophet *Hosea, chap. 13. 14.* where he in time of old speaketh thus, *O death I will*

will be thy plagues, O grave I will be thy destruction.

Now at such a mighty contest, happening in hell, or the innermost parts of the earth: could not the earth contain it self, but was forced thereby to shake, tremble, and quake, so that the Evangelist might well say: *Lo there was a great Earthquake.*

Concerning this, *Luther* writes thus. *Annotante D. Johanne Gerhardo Homil. Sacr. parte 2. super Feria, pasch. 1 Concione 3. in hoc terra motu, Christus ad inferos descendit, Satanam ligavit, captivam duxit captivitatem, infernum destruxit, claves abstulit, morti pradam, eripuit, &c.* That is, in this Earthquake Christ descended into Hell, bound Satan, took captivity captive, spoyled hell, and carried away the keys, and took away the prey of death from him.

Other Divines, especially those that are preachers, are of this opinion; that

that this Earthquake hapned at the time of Christs Resurrection, which was upon *Easter-day* in the morning; thereby shewing, that as the earth at the time of Christs death, did quake and tremble in compassion of the bitter pain, and innocent death of its Lord and Creator; so by a particular great Earthquake, she did now rejoyce again at his Resurrection: and did leap and dance, for joy of the victory and conquest obtained by Jesus Christ: and as it were with both hands (to speak after the fashion of men) delivered her Lord and Creator from her, which now she had inclosed in her to the third day.

Each of these Divines opinions do I allow to be worthy and Godly: forasmuch as neither of them do in the least oppose the Holy Scriptures.

But besides this, the Evangelist *St. Luke* Recordeth, that when *Peter* had preached that excellent Sermon in *Jerusalem*

rusalem, in the great festival of *Whitsontide*, concerning the death of Christ on the one side, and his glorious and victorious Resurrection from the dead on the other: and then by the same Sermon converted about 5000 men to the faith and confession of Christ, *Act. 4. 4.* After the same Sermon, with the unanimous, and earnest prayers, supplications, and thanksgiving of the faithful were ended; it is mentioned in the 31 verse of the afore named Chapter, *that the place was shaken wherein they were assembled together, and they were all filled with the Holy Ghost, and spake the word with boldness.*

And again, when *Paul* and *Silas* were cast into prison in *Philippi*, the chief City of that part of *Macedonia* *Act. 16. 12.* and they then in the prison prayed and sang praises to God, there was suddenly a great Earthquake, so that the foundations of the prison were shaken, and immediately all the doors were opened, and
every

and instructions out of, &c. 87

every ones bands were loosned. ibid. ver. 26. so that the Keeper and all his house were thereby converted to the faith of Christ, and were baptized, *ver. 33. &c.*

I will not now speak concerning what the Evangelist *St. John* Records in his Book of the *Revelations*, chap. 6. 12. 8. 5. 11. 13, 19. and 16. 18. Because generallly Divines, and the faithfull Teachers of the Christian Church do expound those things Allegorically: and do understand thereby, the great and terrible persecutions and efusion of blood, which the Church of Christ hath partly suffered, now lyeth under, & hereafter shall suffer by means of divers Heretiques, false Teachers, and Tyrants which will assist them, towards the end of the world: from whom the Lord in mercy preserve these Countreys and Kingdoms for Jesus Christ his sake.

But that most serious prophesie
which

which Jesus Christ the foundation and mouth of Truth, as a true Prophet, did prophesie and leave unto his Church, concerning such Earthquakes as should really happen before his last Glorious appearance, ought by no means to be here forgotten or omitted. And Christ himselfe hath prophesied concerning Earthquakes toward the end of the world, after this manner, *Mat. 24. 7. and there shall be famines, and pestilences and Earthquakes in divers places. And Mar 13. 8. there shall be Earthquakes in divers places, famines and troubles. Also Luk 21. 11. And great Earthquakes shall be in divers places, and famines, and pestilences, and fearful sights, and great signs, shall there be from Heaven.*

From whence it may be concluded, that when God Almighty now in these last times of the world, doth permit such great and spacious Earthquakes, so many miles in length to happen;
men

men ought not lightly and carelessly to flight them, and think no more of them: but to regard and receive them, as signifying partly, some certain new, and unusual accident impending, or approaching. And partly as the infallible *prodromos*, or forerunners of the last day: yea, *and the creatures earnest expectation that waiteth for the glorious manifestation of the sons of God; Forasmuch as the creature is made subject to vanity against its will. And the creature groaneth, and travaileth in pain together with our selves to be delivered from the bondage of corruption, as Paul teacheth, Rom 8. 19, 20, &c.*

Now therefore mark attentively, and consider well with thy selfe, O thou intelligent Reader: that if the sencelesse and dead creatures, such as Earth, Rocks, Seas, Islands, and the like, that have neither mouth nor tongue, brain, nor heart, can so quake and tremble: yea, as it were, bewaile
and

and condole themselves, when their Lord and Creator is angry, or intendeth to visit Countreys and Kingdoms, with any uncouth or strange thing; how much more ought the hearts of men whilst they live, and in time too: to be amazed, and to tremble and quake for fear of the wrath of God, and his independent judgements.

And if so be they will not do it now in the time of Grace; then may we justly cry out, and complain upon them, with that Holy and reverend Father of the Church Saint *Ambrose*. *O hominum pectora Saxis duriora*. Oh thou heart of man, that art harder, and more insensible than the Rocks and Stones: for they can quake, but the heart of man not; yea then we may well complain with the Prophet *Jeremy*, chap. 5. 3. *Thou hast stricken them, but they have not grieved, thou hast consumed them, but they have refused to receive correction: they have made their faces harder*

harder then a Rock, they have refused so return. And also with the Prophet Zachary in chap. 7. 12. Yea, they have made their hearts as and Adamant stone, therefore came a great wrath from the Lord of Hosts.

O man, man! consider now well with thy selfe in time, that if thou canst not now be moved to tremble and quake for that God, that can so move the earth, and cause her to tremble and quake: then thou maist justly fear, that when the Lord Almighty will so move the earth, *that the Heavens shall pass away with a great noise, and the Elements shall melt with fervent heat, the earth also, and the works that are therein shall be burnt up, 2 Pet. 3. 10.* that it will be then too late for thee to tremble and quake.

And if any now may be moved to great fear and amazement by these small Earthquakes, which do no very great harm; what kind of anguish and

H

terror,

92 *A Theological conclusion.*

terroure thinkest thou, will at that time fall upon all ungodly and incorrigible men, that here would never fear such a God?

Truly then the Kings of the earth, and the rich men, and the chief Captains, and the mighty men, and every bond-man, and every free-man, shall hide themselves in the Dens and in the Rocks of the mountains: and say to the mountains and Rocks, fall on us, and hide us from the face of him that sitteth on the Throne, and from the wrath of the Lamb: for the great day of his wrath is come, and who shall be able to stand?

suspirium *O* Jesus Christ, thou Rock of Salvation, and precious corner-stone of Zion, do thou mollifie our hard and stony hearts, and according to thy promise, give us hearts of flesh, Ezek. 36. 26. That we may now in the time of Grace, be amazed and tremble at our bloody sins, and their well deserved and impendent punishment, that so the punishment

and instruction out of, &c. 93

punishment may be either graciously mitigated, or wholly diverted, according to thy Divine will, for thy great mercies sake, *Amen.*

Now he that can give any better, or more perfect instruction or information, concerning Earthquakes, and yet will not do it: committeth a great sin, inasmuch as he concealeth such wonderful works of the Lord.

FINIS.

Errata.

In the 3 page of the *Preface*, line 19. for 40. read 160. page 18. line ult. for *cannot* read *can*.